

Amendments to the Specification:

Please replace paragraph [26] with the following amended paragraph:

[26] Step ~~[[202]]~~ 205 highlights an aspect of the present invention. As will be discussed, the embodiment of the present invention shown in Fig. 1 assumes that a file system, if any, is maintained outside of the storage system. The file system provides a higher level of organization of data; e.g., the data is organized into files, directories, and so on. The file system therefore provides a mapping between a file (e.g., File-A) and the data blocks which comprise File-A, and maintains the block location information for the blocks which comprise its constituent files. Thus, in step ~~[[202]]~~ 205, when the converted data block is written to the same location on the physical storage device 104 as its corresponding unconverted data block. This preserves the locations of the data on the physical storage device from the point of view of the file system in the host device 101. The conversion therefore transparently performed as far as the file system in the host device 101 is concerned.

Please replace paragraph [33] with the following amended paragraph:

[33] Since the blocks of data on the physical storage device 104 are sequentially numbered and the conversion process proceeds in increasing order from lowest block number, a block number that is smaller in value than the "processed position" datum 108 identifies a converted data block. Consequently, at a step ~~[[304]]~~ 305, the second cryptographic criteria 107 are applied to such a block of data to produce a decrypted data block. Conversely, a block number that is greater than or equal to the "processed position" datum 108 identifies a data block that has not been converted. Consequently, at a step ~~[[305]]~~ 304, the first cryptographic criteria 106 are applied to such a block of data to produce a decrypted block. Then, in a step 306, the data is read out from the decrypted data block and eventually communicated back to the host device 101 to service the read request.